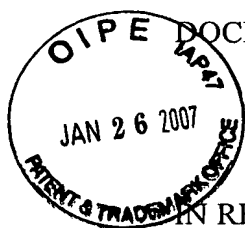


IFW



DOCKET NO.: 283236US2X PCT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF:

Hiroyuki OCHIAI, et al.

SERIAL NO: 10/560,070

GROUP: 2190

FILED: December 9, 2005

EXAMINER:

FOR: METAL PRODUCT PRODUCING METHOD, METAL PRODUCT, METAL  
COMPONENT CONNECTING METHOD, AND CONNECTION STRUCTURE

**LETTER**

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Singaporean Written Opinion for the Examiner's consideration.  
The reference(s) cited therein have been previously filed on March 7, 2006.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Marvin J. Spivak

Registration No. 24,913  
Raymond F. Cardillo, Jr.  
Registration No. 40,440

Customer Number

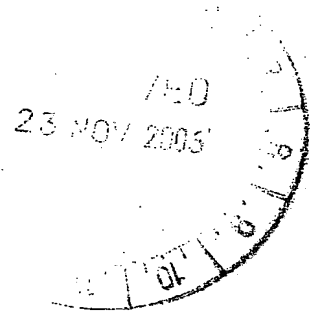
**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 03/06)

RF 240

In Reply Please Quote Our Reference

Your Ref : 1026219PAT/ISHIKAWA/VHS/PS  
 Our Ref : 2005080544/061122/TMRMI/1105  
 Date : 22/11/2006  
 Writer's Direct Line : 63302748



DONALDSON & BURKINSHAW  
 P.O. BOX 3667  
 ROBINSON ROAD POST OFFICE  
 SINGAPORE 905667

Dear Sir,

Singapore Patent Application No.: 200508054-4

Title of invention: METAL PRODUCT PRODUCING METHOD, METAL PRODUCT, METAL  
 COMPONENT CONNECTING METHOD, AND CONNECTION STRUCTURE

Applicant(s): ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD. (JP)

#### INVITATION TO RESPOND TO WRITTEN OPINION

We forward with this letter a copy of the Search Report and Written Opinion drawn up by the Examiner in connection with your request for a Search and Examination Report.

You are invited to respond to the opinion by submitting:

- (a) Written submissions or arguments disagreeing with the Examiner's opinion and/or
- (b) An amendment of the specification of the application.

If you intend to respond, the response must be filed within 5 months from the date of this letter. You are also advised to inform us early if you do not intend to respond.

The Examiner will proceed to establish the Examination Report if no response is received by the end of the prescribed period.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully,



ROZANA MISNI  
 for REGISTRAR OF PATENTS  
 SINGAPORE

# AUSTRALIAN PATENT OFFICE

## WRITTEN OPINION

		Date of mailing <i>day/month/year</i> <b>24 OCT 2006</b>	
Applicant's or agent's file reference <b>1026219PAT/ISHIKAWA/VHS/PS</b>		<b>REPLY DUE</b> within FIVE MONTHS of the date of the Registrar's letter enclosing the written opinion	
Application No. <b>SG 200508054-4</b>	Application Filing Date ( <i>day/month/year</i> ) <b>11 June 2004</b>	Priority Date ( <i>day/month/year</i> ) <b>11 June 2003</b>	
International Patent Classification (IPC) (as indicated in the search report) Int. Cl. <b>C23C 26/00 (2006.01)      B23H 5/00 (2006.01)</b> <b>B22D 29/00 (2006.01)      C21D 9/50 (2006.01)</b> Action Date: 16 October 2006			
Applicant <b>ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO LTD</b>			

1. This First written opinion consists of a total of 5 sheets.
2. This opinion contains indications relating to the following items:
 

I	<input checked="" type="checkbox"/>	Basis of the opinion
II	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
III	<input checked="" type="checkbox"/>	Lack of unity of invention
IV	<input checked="" type="checkbox"/>	Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
V	<input type="checkbox"/>	Certain documents cited
VI	<input type="checkbox"/>	Certain defects in the application
VII	<input checked="" type="checkbox"/>	Certain observations on the application
3. This opinion is based upon the assumption that the priority claim is valid.
4. The search report used was issued by the Australian Patent Office, and the date of completion is: **16 October 2006**
5. If no reply is filed, the examination report will be established on the basis of this opinion.
6. The date by which the examination report will be established is: **11 September 2007**

Name and mailing address AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: <a href="mailto:pct@ipaaustralia.gov.au">pct@ipaaustralia.gov.au</a> Facsimile no. 61 2 62853929	Authorized Officer  <b>GREGORY DIVEN</b>
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**I. Basis of the opinion**

1. This opinion has been drawn on the basis of:

☐ the application as originally filed.

☒ the description, pages 1-6, 8-11, 14-16, 20 and 22, as originally filed,  
pages 7, 12, 13, 17, 18, 19, 21 and 23, filed with the request,  
pages , received on with the letter of

☒ the claims, pages , as originally filed,  
pages 24-27, filed with the request,  
pages , received on with the letter of

☒ the drawings, sheets/fig. 1-14-14/14, as originally filed,  
sheets/fig. , filed with the request,  
sheets/fig. , received on with the letter of

☐ the sequence listing part of the description:  
pages , as originally filed  
pages , filed with the demand  
pages , received on with the letter of

2. The amendments have resulted in the cancellation of: pages:  
sheets of drawings/figures No :

3 ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

III. Lack of unity of invention

1. This Office found multiple invention in this application, as follows:

The Australian Patent Office has determined that the application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

1. Claims 1-14 are directed to a method for producing a metal product comprising molding a main body of metal, removing a portion defining a defect to form a recess portion, depositing a deposition from an electrode to fill the recess. It is considered that the method comprises a first special technical feature.
2. Claims 15-20 are directed to a method of joining pieces of metal comprising metal components with a bevelled edge which define a recess portion when butted against each other and depositing a deposition from an electrode into the recess portion. It is considered that the method comprises a second special technical feature.

The common feature linking these sets of claims relates to forming a recess in the metal, or between metal strips and depositing a deposition from an electrode into the recess. Such methods describe standard methods of welding well known to people skilled in welding. Accordingly the claims do not relate to one invention or to a single inventive concept, a priori.

2. Consequently, the following parts of the application were the subject of examination in establishing this report:

- ☒ all parts.  
☐ the parts relating to claims Nos.

IV. Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	YES
	Claims 1-20	NO
Inventive step (IS)	Claims	YES
	Claims 1-20	NO
Industrial applicability (IA)	Claims 1-20	YES
	Claims	NO

2. Citations and explanations

The following documents identified in the Search Report have been considered for the purposes of this report:

03/07/06  
JP 62-161493  
JP 09-192937  
JP 04-309452  
JP 61-017398

Novelty (N) and Inventive Step (IS)

The invention defined in claims 1-20 is not novel (and does not involve an inventive step) when compared with the JP 62-161493 prior art document that discloses all the essential features of the invention claimed.

JP 62-161493 describes the repair of a metal tool by creating a recess in the tool where the crack exists and depositing into the recess using an electrode.

Industrial Applicability (IA)

The claims are related to products capable of commercial application.

**VII. Certain observations on the application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- ☒ The claimed invention is patentable according to Section 13(2); or
- ☐ The claimed invention is unpatentable according to Section 13(2) because: